

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/583,464  
Source: IFWP  
Date Processed by STIC: 6/27/06

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 06/27/2006

PATENT APPLICATION: US/10/583,464

TIME: 12:22:50

Input Set : A:\025721-110US.ST25.txt

Output Set: N:\CRF4\06272006\J583464.raw

3 <110> APPLICANT: Arumugham, Rasappa  
 4 Prasad, A. Krishna  
 6 <120> TITLE OF INVENTION: Methods of Producing Immunogenic Peptide Carrier Conjugates  
 8 <130> FILE REFERENCE: 025721-000110US  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/583,464  
 C--> 11 <141> CURRENT FILING DATE: 2006-06-16  
 13 <150> PRIOR APPLICATION NUMBER: US 60/530,480  
 14 <151> PRIOR FILING DATE: 2003-12-17  
 16 <160> NUMBER OF SEQ ID NOS: 54  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 6  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Homo sapiens  
 25 <400> SEQUENCE: 1  
 27 Asp Ala Glu Phe Arg Cys  
 28 1 5  
 31 <210> SEQ ID NO: 2  
 32 <211> LENGTH: 8  
 33 <212> TYPE: PRT  
 34 <213> ORGANISM: Homo sapiens  
 36 <400> SEQUENCE: 2  
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 39 1 5  
 42 <210> SEQ ID NO: 3  
 43 <211> LENGTH: 10  
 44 <212> TYPE: PRT  
 45 <213> ORGANISM: Homo sapiens  
 47 <400> SEQUENCE: 3  
 49 Asp Ala Glu Phe Arg His Asp Ser Gly Cys  
 50 1 5 10  
 53 <210> SEQ ID NO: 4  
 54 <211> LENGTH: 13  
 55 <212> TYPE: PRT  
 56 <213> ORGANISM: Homo sapiens  
 58 <400> SEQUENCE: 4  
 60 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Cys  
 61 1 5 10  
 64 <210> SEQ ID NO: 5  
 65 <211> LENGTH: 10  
 66 <212> TYPE: PRT  
 67 <213> ORGANISM: Homo sapiens  
 69 <400> SEQUENCE: 5

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71 Asp Ala Glu Phe Arg Gly Ala Gly Ala Cys
72 1          5          10
75 <210> SEQ ID NO: 6
76 <211> LENGTH: 12
77 <212> TYPE: PRT
78 <213> ORGANISM: Homo sapiens
80 <400> SEQUENCE: 6
82 Asp Ala Glu Phe Arg His Asp Gly Ala Gly Ala Cys
83 1          5          10
86 <210> SEQ ID NO: 7
87 <211> LENGTH: 14
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 7
93 Asp Ala Glu Phe Arg His Asp Ser Gly Gly Ala Gly Ala Cys
94 1          5          10
97 <210> SEQ ID NO: 8
98 <211> LENGTH: 17
99 <212> TYPE: PRT
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 8
104 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val Gly Ala Gly Ala
105 1          5          10          15
108 Cys
112 <210> SEQ ID NO: 9
113 <211> LENGTH: 13
114 <212> TYPE: PRT
115 <213> ORGANISM: Homo sapiens
117 <400> SEQUENCE: 9
119 Val Glu Tyr Gly Ser Asp His Arg Phe Glu Ala Asp Cys
120 1          5          10
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 4
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 10
130 Gly Ala Gly Ala
131 1
134 <210> SEQ ID NO: 11
135 <211> LENGTH: 13
136 <212> TYPE: PRT
137 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 11
141 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
142 1          5          10
145 <210> SEQ ID NO: 12
146 <211> LENGTH: 13
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens

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Input Set : A:\025721-110US.ST25.txt

Output Set: N:\CRF4\06272006\J583464.raw

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151 <220> FEATURE:
152 <221> NAME/KEY: misc_feature
153 <222> LOCATION: (3)..(3)
154 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
156 <400> SEQUENCE: 12
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159 1 5 10
162 <210> SEQ ID NO: 13
163 <211> LENGTH: 16
164 <212> TYPE: PRT
165 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 13
169 Glu Lys Lys Ile Ala Lys Met Glu Lys Ala Ser Ser Val Phe Asn Val
170 1 5 10 15
173 <210> SEQ ID NO: 14
174 <211> LENGTH: 10
175 <212> TYPE: PRT
176 <213> ORGANISM: Homo sapiens
178 <400> SEQUENCE: 14
180 Phe Glu Leu Leu Thr Arg Ile Leu Thr Ile
181 1 5 10
184 <210> SEQ ID NO: 15
185 <211> LENGTH: 19
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 15
191 Asp Gln Ser Ile Gly Asp Leu Ile Ala Glu Ala Met Asp Lys Val Gly
192 1 5 10 15
195 Asn Glu Gly
199 <210> SEQ ID NO: 16
200 <211> LENGTH: 14
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapiens
204 <400> SEQUENCE: 16
206 Gln Val His Phe Gln Pro Leu Pro Pro Ala Val Val Lys Leu
207 1 5 10
210 <210> SEQ ID NO: 17
211 <211> LENGTH: 15
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <400> SEQUENCE: 17
217 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
218 1 5 10 15
221 <210> SEQ ID NO: 18
222 <211> LENGTH: 21
223 <212> TYPE: PRT
224 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 18
228 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser

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229 1          5          10          15
232 Ala Ser His Leu Glu
233          20
236 <210> SEQ ID NO: 19
237 <211> LENGTH: 15
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
241 <400> SEQUENCE: 19
243 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr
244 1          5          10          15
247 <210> SEQ ID NO: 20
248 <211> LENGTH: 51
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 20
254 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
255 1          5          10          15
258 Ile Gly Ile Thr Glu Leu Cys Phe Asn Asn Phe Thr Val Ser Phe Trp
259          20          25          30
262 Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Asp Ala Glu Phe
263          35          40          45
266 Arg His Asp
267          50
270 <210> SEQ ID NO: 21
271 <211> LENGTH: 42
272 <212> TYPE: PRT
273 <213> ORGANISM: Homo sapiens
275 <400> SEQUENCE: 21
277 Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
278 1          5          10          15
281 Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
282          20          25          30
285 Gly Leu Met Val Gly Gly Val Val Ile Ala
286          35          40
289 <210> SEQ ID NO: 22
290 <211> LENGTH: 22
291 <212> TYPE: PRT
292 <213> ORGANISM: Homo sapiens
294 <400> SEQUENCE: 22
296 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
297 1          5          10          15
300 Ile Gly Ile Thr Glu Leu
301          20
304 <210> SEQ ID NO: 23
305 <211> LENGTH: 28
306 <212> TYPE: PRT
307 <213> ORGANISM: Homo sapiens
309 <400> SEQUENCE: 23
311 Asp Ala Glu Phe Arg His Asp Phe Asn Asn Phe Thr Val Ser Phe Trp

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Input Set : A:\025721-110US.ST25.txt

Output Set: N:\CRF4\06272006\J583464.raw

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312 1          5          10          15
315 Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
316          20          25
319 <210> SEQ ID NO: 24
320 <211> LENGTH: 43
321 <212> TYPE: PRT
322 <213> ORGANISM: Homo sapiens
324 <400> SEQUENCE: 24
326 Asp Ala Glu Phe Arg His Asp Gln Tyr Ile Lys Ala Asn Ser Lys Phe
327 1          5          10          15
330 Ile Gly Ile Thr Glu Leu Phe Asn Asn Phe Thr Val Ser Phe Trp Leu
331          20          25          30
334 Arg Val Pro Lys Val Ser Ala Ser His Leu Glu
335          35          40
338 <210> SEQ ID NO: 25
339 <211> LENGTH: 22
340 <212> TYPE: PRT
341 <213> ORGANISM: Homo sapiens
343 <400> SEQUENCE: 25
345 Glu Phe Arg His Asp Ser Gly Gln Tyr Ile Lys Ala Asn Ser Lys Phe
346 1          5          10          15
349 Ile Gly Ile Thr Glu Leu
350          20
353 <210> SEQ ID NO: 26
354 <211> LENGTH: 20
355 <212> TYPE: PRT
356 <213> ORGANISM: Homo sapiens
359 <220> FEATURE:
360 <221> NAME/KEY: misc_feature
361 <222> LOCATION: (3)..(3)
362 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
364 <400> SEQUENCE: 26
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367 1          5          10          15
370 Phe Arg His Asp
371          20
374 <210> SEQ ID NO: 27
375 <211> LENGTH: 34
376 <212> TYPE: PRT
377 <213> ORGANISM: Homo sapiens
380 <220> FEATURE:
381 <221> NAME/KEY: misc_feature
382 <222> LOCATION: (24)..(24)
383 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
385 <400> SEQUENCE: 27
387 Asp Ala Glu Phe Arg His Asp Asp Ala Glu Phe Arg His Asp Asp Ala
388 1          5          10          15
W--> 391 Glu Phe Arg His Asp Ala Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala
392          20          25          30

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/583,464

DATE: 06/27/2006  
TIME: 12:22:51

Input Set : A:\025721-110US.ST25.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; Xaa Pos. 3 ✓

Seq#:26; Xaa Pos. 3 ✓

Seq#:27; Xaa Pos. 24 ✓

Seq#:28; Xaa Pos. 3 ✓

Seq#:29; Xaa Pos. 10

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:43,44,45,46,47,48,49,50,51,52,53,54

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/583,464

DATE: 06/27/2006

TIME: 12:22:51

Input Set : A:\025721-110US.ST25.txt

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L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:16  
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0